



Chemical Waste Management of the Northwest

17629 Cedar Springs Lane
Arlington, OR 97812
(541) 454-2030 phone
(541) 454-3247 fax

July 12, 2012

Elizabeth Druback
Eastern Region Manager
Hazardous Waste Program
Oregon Department of Environmental Quality
400 E Scenic Dr., Suite 2-307
The Dalles, OR 97058

**RE: Chemical Waste Management of the Northwest, Inc. (CWMNW)
Permit #ORD 089 452 353
Request for Approval to Treat Water Reactive Wastes**

Dear Ms. Druback:

Per permit condition IV.C.2. CWMNW requests the Oregon Department of Environmental Quality's approval to accept and treat thirty-two, 110-gallon drums of zirconium grinding swarf, at CWMNW. The waste profile accompanies this request (OR321327). The waste drums contain grinding swarf produced during the finishing of zirconium alloy plates at the ATI Precision Finishing facility in Pennsylvania. The swarf contained in the drums includes metal fines or threads, and small particles of the grinding media.

The waste will be treated by deactivation in the stabilization bins. Any underlying hazardous constituents that need treatment will also be stabilized.

Treatment of this water reactive waste material will be conducted using procedures outlined in the *Stabilization/Chemical Treatment Plan*, and modification required for insuring the health and safety of employees and contractors.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Please call me with questions or comments at (541) 454-3201.

Sincerely,

Samir M. Jiries
Environmental Protection Manager

cc: Gary Fisher, District Manager, CWMNW
Rich Duval, ODEQ, Pendleton



Waste Management Profile

Requested Facility: Chemical Waste Management (Hazardous Waste Facility)

☐ Unsure Profile Number: OR321319

☐ Check if there are multiple generator locations. Attach locations.

☐ Renewal? Original Profile Number: _____

A. GENERATOR INFORMATION (MATERIAL ORIGIN)

1. Generator Name: ATI Wah Chang
2. Site Address: 1600 NE Old Salem Rd
(City, State, ZIP) Albany OR 97321
3. County: Linn
4. Contact Name: Frank Hamilton
5. Email: frank.hamilton@atimetals.com
6. Phone: (541) 926-4211 7. Fax: (541) 924-6874
8. Generator EPA ID: ORD050959848 ☐ N/A
9. State ID: _____ ☒ N/A

B. BILLING INFORMATION

☒ SAME AS GENERATOR

1. Billing Name: ATI Wah Chang
2. Billing Address: 1600 NE Old Salem Rd
(City, State, ZIP) Albany OR 97321
3. Contact Name: Frank Hamilton
4. Email: frank.hamilton@atimetals.com
5. Phone: (541) 926-4211 6. Fax: (541) 924-6874
7. WM Hauled? ☐ Yes ☒ No
8. P.O. Number: 218129

C. MATERIAL INFORMATION

1. Common Name: Zirconium grinding swarf
Describe Process Generating Material: ☒ See Attached
Metal Working - See Attached
2. Material Composition and Contaminants: ☒ See Attached

1. Zirconium	90-100 %
2. Hafnium	0-5 %
3. Niobium	0-3 %
4. Tin	0-2 %
	≥100%

3. State Waste Codes: _____ ☒ N/A
4. Color: Varies - See Attached
5. Physical State at 70°F: ☐ Solid ☐ Liquid ☒ Other: solid w/ liquids
6. Free Liquid Range Percentage: 25 to 35 ☐ N/A (Solid)
7. pH: 7 to 11 ☐ N/A (Solid)
8. Strong Odor: ☐ Yes ☒ No Describe: _____
9. Flash Point: ☐ <140°F ☐ 140°-199°F ☐ ≥200° ☒ N/A (Solid)

D. REGULATORY INFORMATION

1. EPA Hazardous Waste? ☒ Yes* ☐ No
Code: D003,D001
2. State Hazardous Waste? ☐ Yes ☒ No
Code: _____
3. Excluded waste under 40 CFR 261.4 (a) or (b)? ☐ Yes* ☒ No
4. Contains Underlying Hazardous Constituents? ☒ Yes* ☐ No
5. Contains benzene and subject to Benzene NESHAP? ☐ Yes* ☒ No
6. Facility remediation subject to 40 CFR 63 GGGGG? ☐ Yes* ☒ No
7. CERCLA or State-mandated clean-up? ☐ Yes* ☒ No
8. NRC or State-regulated radioactive or NORM waste? ☐ Yes* ☒ No
*If Yes, see Addendum (page 2) for additional questions and space.
9. Contains PCBs? → If Yes, answer a, b and c. ☐ Yes ☒ No
a. Regulated by 40 CFR 761? ☐ Yes ☐ No
b. Remediation under 40 CFR 761.61 (a)? ☐ Yes ☐ No
c. Were PCB imported into the US? ☐ Yes ☐ No
10. Regulated and/or Untreated Medical/Infectious Waste? ☐ Yes ☒ No
11. Contains Asbestos? ☐ Yes: Friable ☐ Yes: Non-Friable ☒ No

E. ANALYTICAL AND OTHER REPRESENTATIVE INFORMATION

1. Analytical attached ☒ Yes
Please identify applicable samples and/or lab reports:
See Attached
2. Other information attached (such as MSDS)? ☒ Yes

F. SHIPPING AND DOT INFORMATION

1. ☒ One-Time Event ☐ Repeat Event/Ongoing Business
2. Estimated Quantity/Unit of Measure: 32
☐ Tons ☐ Yards ☒ Drums ☐ Gallons ☐ Other: _____
3. Container Type and Size: 110-gal overpack
4. USDOT Proper Shipping Name: _____ ☐ N/A
RQ UN 1358, Waste Zirconium Powder, wetted, 4.1, PGI

G. GENERATOR CERTIFICATION (PLEASE READ AND CERTIFY BY SIGNATURE)

By signing this Waste Management Profile, I hereby certify that all information submitted in this and all attached documents contain true and accurate descriptions of this material, and that all relevant information necessary for proper material characterization and to identify known and suspected hazards has been provided. Any analytical data attached was derived from a sample that is representative as defined in 40 CFR 261 - Appendix 1 or by using an equivalent method. All changes occurring in the character of the material (i.e., changes in the process or new analytical) will be identified by the Generator and be disclosed to Waste Management prior to providing the material to Waste Management.

If I am an agent signing on behalf of the Generator, I have confirmed with the Generator that information contained in this Profile is accurate and complete.

Name (Print): Ryan Bodily Date: 05/07/2012
Title: Environmental Mgr
Company: ATI Wah Chang

Certification Signature

Ryan Bodily

THINK GREEN:

QUESTIONS? CALL 800 963 4776 FOR ASSISTANCE

Last Revised March 20, 2012
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Waste Management Profile Addendum



Only complete this Addendum if prompted by responses on Waste Management Profile (page 1) or to provide additional information. Sections and question numbers correspond to Waste Management Profile.

Profile Number: OR321319

SECTION C

Describe Process Generating Material (Continued from page 1):

If more space is needed, please attach additional pages.

Material Composition and Contaminants (Continued from page 1):

If more space is needed, please attach additional pages.

5. Chromium	0-1 %
6. Titanium	0-1 %
7. Aluminum	0-1 %
8. Vanadium	0-1 %
9.	
10.	
≥100%	

SECTION D

Only questions with a "Yes" response on Waste Management Profile (page 1) need to be answered here.

1. EPA Hazardous Waste

a. Please list all USEPA listed and characteristic waste code numbers:

b. Is the material subject to the Alternative Debris standards (40 CFR 268.45)?

☐ Yes ☒ No

c. Is the material subject to the Alternative Soil standards (40 CFR 268.49)? → If Yes, complete question 4.

☐ Yes ☒ No

d. Is the material exempt from Subpart CC Controls (40 CFR 264.1083 and 265.1084)?

☐ Yes ☒ No

→ If Yes, please select one of the following:

☐ Waste has been determined to be LDR exempt [265.1083(c)(4) and 265.1084(c)(4)] based on the fact that it meets all applicable organic treatment standards (including UHCs for D-coded characteristic wastes) or a Specified Technology has been utilized.

☐ Waste does not qualify for a LDR exemption, but the average VOC at the point of origination is <500 ppmw and this determination was based on analytical testing (upload copy of analysis) or generator knowledge.

2. State Hazardous Waste → Please list all state waste codes:

3. Excluded Waste → Please select which of the following categories apply to your material:

☐ Delisted Hazardous Waste

☐ Excluded Waste under 40 CFR 261.4 → Specify Exclusion:

☐ Treated Hazardous Waste Debris

☐ Treated Characteristic Hazardous Waste → If checked, complete question 4.

4. Underlying Hazardous Constituents → Please list all Underlying Hazardous Constituents:

Chromium is present in the metal, but is not expected to be present above the UTS. See Attached.

5. Benzene NESHAP → Please include benzene concentration and percent water/moisture in chemical composition.

a. Are you a TSDF? → If yes, please complete Benzene NESHAP questionnaire. If not, continue.

b. What is your facility's current total annual benzene quantity in Megagrams?

☐ <1 Mg ☐ 1–9.99 Mg ☐ ≥10 Mg

c. Is this waste soil from remediation at a closed facility?

☐ Yes ☐ No

d. Has material been treated to remove 99% of the benzene or to achieve <10 ppmw?

☐ Yes ☐ No

e. Is material exempt from controls in accordance with 40 CFR 61.342?

☐ Yes ☐ No

→ If yes, specify exemption:

f. Based on your knowledge of your waste and the BWON regulations, do you believe that this waste stream is subject to treatment and control requirements at an off-site TSDF?

☐ Yes ☐ No

6. 40 CFR 63 GGGGG → Does the material contain <500 ppw VOHAPs at the point of determination?

☐ Yes ☐ No

7. CERCLA or State-Mandated clean up → Please submit the Record of Decision or other documentation to assist others in the evaluation for proper disposal.

8. NRC or state regulated radioactive or NORM Waste → Please identify Isotopes and pCi/g:

Attachment for Profile Number OR321319

The waste proposed for treatment and disposal under OR321319 consists of 32 drums of material (the "Waste Drums"). In December 2011, the Waste Drums were part of a 40-drum shipment of waste from ATI Wah Chang's ("ATI") facility in Albany, Oregon to the Heritage-WTI, Inc. ("WTI") facility (EPA ID OHD98063541) located at 1250 St. George St. in East Liverpool, Ohio (the "WTI Facility"). The Waste Drums are currently located at the WTI Facility and will be offered for transport from the WTI Facility to Chemical Waste Management of the Northwest ("CWMNW"). The Waste Drums will be prepared for shipment from the WTI Facility and transported to CWMNW by Clean Harbors Environmental Services, Inc. ("Clean Harbors").

The Waste Drums contain grinding swarf produced during the finishing of zirconium alloy plates at the ATI Precision Finishing facility in Pennsylvania. The swarf produced in the zirconium plate finishing process, and contained in the Waste Drums, includes metal fines or threads, and small particles of the grinding media (minerals such as garnet and silica). The swarf is generally silver or grayish, but the color of the material is not consistent or uniform. Considering the types of zirconium alloy plates finished at the ATI Precision Finishing facility, and the fact that the facility also finishes titanium alloy plates, ATI believes the metals in the Waste Drums consist primarily of zirconium, with limited amounts of other metals. ATI estimates that the metals in the Waste Drums may include: zirconium (90-100%), hafnium (0-5%), niobium (0-3%), tin (0-2%), iron (0-1%), chromium (0-1%), titanium (0-1%), aluminum (0-1%), and vanadium (0-1%). During the finishing process, the plates and swarf are saturated with a solution containing water and Cal-Grind 1541® (see attached MSDS), a water soluble coolant and rust inhibitor (at 3 – 5 % by volume). The Waste Drums are expected to contain between 0 – 25% of that solution. .

The Waste Drums also contain a water soluble oil, Hangsterfer's S-500® CF (see attached MSDS), that ATI Wah Chang added to the drums before they were shipped to the WTI facility. The Waste Drums are expected to contain 0 – 25% of this soluble oil. At the time of their shipment to the WTI facility, the Waste Drums consisted of 55-gallon steel drums overpacked in 85-gallon steel salvage drums.

WTI alleges that one of the 40 drums of waste that ATI Wah Chang had shipped in December 2011 to the WTI Facility was involved in a fatal accident there on December 17, 2011. At the time of the accident, WTI employees were opening one of the drums, draining it of liquid and repackaging its contents into smaller loads. We understand from WTI that the material in the drum ignited while WTI workers were performing those tasks, creating an intense fire in the drum. One worker was fatally burned in the accident, and another was also badly burned.

Although ATI does not possess many details regarding the accident, WTI believes the drum involved in the accident may have contained a pocket of fine, dry, white powder. Because the accident involved an intense fire, WTI suggested to ATI that material may have been dry, powdered zirconium. ATI does not understand how the drum involved in WTI's accident—or any of the other Waste Drums—could contain dry zirconium powder. The process at the ATI Precision Finishing facility that produced the grinding swarf should not produce any dry powder,

and the material in the Waste Drums should be wet with water soluble oil and coolant / rust inhibitor solution.

However, because of the gravity of the accident at WTI, and in the interests of safety, each of the Waste Drums is presumed to contain dry zirconium powder for the purpose of this waste profile (OR321319).

Prior to shipment from the WTI facility, CHES will prepare each of the Waste Drums for shipment using the following technique. CHES will open each 85-gal drum and fill it with a 37% solution of sodium silicate (MSDS attached) to a level covering the inner 55-gal drum. CHES will then penetrate the lid of the inner 55-gal drum and add additional sodium silicate solution to the inner drum. ATI estimates that the Waste Drums may contain 0 – 30% of the sodium silicate solution. All told, ATI estimates that the volume of free liquids in the drums could range between 25 - 35%. Before shipping the drums to CWMNW, CHES will close each 85-gal drum and place each drum into a 110-gal overpack.

For purposes of transportation and disposal, ATI has tentatively characterized the Waste Drums as D001 ignitable and D003 reactive hazardous waste. Based on its testing of zirconium grinding swarf and its knowledge of the processes that produce that material, ATI believes that the material in the Waste Drums was not a hazardous waste when it was shipped to the WTI Facility for disposal (see attached Veolia profile 434443). However, in response to the accident at the WTI Facility involving this waste and WTI's allegations about the accident, we are profiling the Waste Drums to CWMNW under the D001 and D003 hazardous waste codes. In addition, we request that the Waste Drums be managed for disposal as if they each could contain dry zirconium powder.

WTI will not authorize ATI to collect or analyze samples from the Waste Drums before the drums are shipped to CWMNW. Accordingly, to provide CWMNW with information to evaluate the relative toxicity of the material in the Waste Drums, we collected samples of other zirconium grinding swarf produced by the ATI Precision Finishing facility from zirconium alloy plates similar to the plates used to produce the swarf in the Waste Drums. The TCLP analytical results for those samples, with UHC data, are attached. Based on those data, and our knowledge of the ATI Precision Finishing facility process that produces zirconium grinding swarf, ATI does not believe that the material in the Waste Drums will possess the hazardous characteristic of toxicity.



Chemical Waste Management of the Northwest

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July 12, 2012

Elizabeth Druback
Eastern Region Manager
Hazardous Waste Program
Oregon Department of Environmental Quality
400 E Scenic Dr., Suite 2-307
The Dalles, OR 97058

**RE: Chemical Waste Management of the Northwest, Inc. (CWMNW)
Permit #ORD 089 452 353
Request for Approval to Treat Water Reactive Wastes**

Dear Ms. Druback:

Per permit condition IV.C.2. CWMNW requests the Oregon Department of Environmental Quality's approval to accept and treat thirty-two, 110-gallon drums of zirconium grinding swarf, at CWMNW. The waste profile accompanies this request (OR321327). The waste drums contain grinding swarf produced during the finishing of zirconium alloy plates at the ATI Precision Finishing facility in Pennsylvania. The swarf contained in the drums includes metal fines or threads, and small particles of the grinding media.

The waste will be treated by deactivation in the stabilization bins. Any underlying hazardous constituents that need treatment will also be stabilized.

Treatment of this water reactive waste material will be conducted using procedures outlined in the *Stabilization/Chemical Treatment Plan*, and modification required for insuring the health and safety of employees and contractors.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Please call me with questions or comments at (541) 454-3201.

Sincerely,

Samir M. Jiries
Environmental Protection Manager

cc: Gary Fisher, District Manager, CWMNW
Rich Duval, ODEQ, Pendleton



Waste Management Profile

Requested Facility: Chemical Waste Management (Hazardous Waste Facility)

☐ Unsure Profile Number: OR321319

☐ Check if there are multiple generator locations. Attach locations.

☐ Renewal? Original Profile Number: _____

A. GENERATOR INFORMATION (MATERIAL ORIGIN)

1. Generator Name: ATI Wah Chang
2. Site Address: 1600 NE Old Salem Rd
(City, State, ZIP) Albany OR 97321
3. County: Linn
4. Contact Name: Frank Hamilton
5. Email: frank.hamilton@atimetals.com
6. Phone: (541) 926-4211 7. Fax: (541) 924-6874
8. Generator EPA ID: ORD050959848 ☐ N/A
9. State ID: _____ ☒ N/A

B. BILLING INFORMATION

☒ SAME AS GENERATOR

1. Billing Name: ATI Wah Chang
2. Billing Address: 1600 NE Old Salem Rd
(City, State, ZIP) Albany OR 97321
3. Contact Name: Frank Hamilton
4. Email: frank.hamilton@atimetals.com
5. Phone: (541) 926-4211 6. Fax: (541) 924-6874
7. WM Hauled? ☐ Yes ☒ No
8. P.O. Number: 218129

C. MATERIAL INFORMATION

1. Common Name: Zirconium grinding swarf
Describe Process Generating Material: ☒ See Attached
Metal Working - See Attached
2. Material Composition and Contaminants: ☒ See Attached

1. Zirconium	90-100 %
2. Hafnium	0-5 %
3. Niobium	0-3 %
4. Tin	0-2 %
	≥100%
3. State Waste Codes: _____ ☒ N/A
4. Color: Varies - See Attached
5. Physical State at 70°F: ☐ Solid ☐ Liquid ☒ Other: solid w/ liquids
6. Free Liquid Range Percentage: 25 to 35 ☐ N/A (Solid)
7. pH: 7 to 11 ☐ N/A (Solid)
8. Strong Odor: ☐ Yes ☒ No Describe: _____
9. Flash Point: ☐ <140°F ☐ 140°-199°F ☐ ≥200° ☒ N/A (Solid)

E. ANALYTICAL AND OTHER REPRESENTATIVE INFORMATION

1. Analytical attached ☒ Yes
Please identify applicable samples and/or lab reports:
See Attached
2. Other information attached (such as MSDS)? ☒ Yes

D. REGULATORY INFORMATION

1. EPA Hazardous Waste? ☒ Yes* ☐ No
Code: D003,D001
2. State Hazardous Waste? ☐ Yes ☒ No
Code: _____
3. Excluded waste under 40 CFR 261.4 (a) or (b)? ☐ Yes* ☒ No
4. Contains Underlying Hazardous Constituents? ☒ Yes* ☐ No
5. Contains benzene and subject to Benzene NESHAP? ☐ Yes* ☒ No
6. Facility remediation subject to 40 CFR 63 GGGGG? ☐ Yes* ☒ No
7. CERCLA or State-mandated clean-up? ☐ Yes* ☒ No
8. NRC or State-regulated radioactive or NORM waste? ☐ Yes* ☒ No
*If Yes, see Addendum (page 2) for additional questions and space.
9. Contains PCBs? → If Yes, answer a, b and c. ☐ Yes ☒ No
a. Regulated by 40 CFR 761? ☐ Yes ☐ No
b. Remediation under 40 CFR 761.61 (a)? ☐ Yes ☐ No
c. Were PCB imported into the US? ☐ Yes ☐ No
10. Regulated and/or Untreated Medical/Infectious Waste? ☐ Yes ☒ No
11. Contains Asbestos? ☐ Yes: Friable ☐ Yes: Non-Friable ☒ No

F. SHIPPING AND DOT INFORMATION

1. ☒ One-Time Event ☐ Repeat Event/Ongoing Business
2. Estimated Quantity/Unit of Measure: 32
☐ Tons ☐ Yards ☒ Drums ☐ Gallons ☐ Other: _____
3. Container Type and Size: 110-gal overpack
4. USDOT Proper Shipping Name: _____ ☐ N/A
RQ UN 1358, Waste Zirconium Powder, wetted, 4.1, PGII

G. GENERATOR CERTIFICATION (PLEASE READ AND CERTIFY BY SIGNATURE)

By signing this Waste Management Profile, I hereby certify that all information submitted in this and all attached documents contain true and accurate descriptions of this material, and that all relevant information necessary for proper material characterization and to identify known and suspected hazards has been provided. Any analytical data attached was derived from a sample that is representative as defined in 40 CFR 261 - Appendix 1 or by using an equivalent method. All changes occurring in the character of the material (i.e., changes in the process or new analytical) will be identified by the Generator and be disclosed to Waste Management prior to providing the material to Waste Management.

If I am an agent signing on behalf of the Generator, I have confirmed with the Generator that information contained in this Profile is accurate and complete.

Name (Print): Ryan Bodily Date: 05/07/2012

Title: Environmental Mgr

Company: ATI Wah Chang

Certification Signature

Ryan Bodily

THINK GREEN®

QUESTIONS? CALL 800 963 4776 FOR ASSISTANCE

Last Revised March 20, 2012
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Waste Management Profile Addendum



Only complete this Addendum if prompted by responses on Waste Management Profile (page 1) or to provide additional information. Sections and question numbers correspond to Waste Management Profile.

Profile Number: OR321319

SECTION C

Describe Process Generating Material (Continued from page 1):

If more space is needed, please attach additional pages.

Material Composition and Contaminants (Continued from page 1):

If more space is needed, please attach additional pages.

5. Chromium	0-1 %
6. Titanium	0-1 %
7. Aluminum	0-1 %
8. Vanadium	0-1 %
9.	
10.	
	≥100%

SECTION D

Only questions with a "Yes" response on Waste Management Profile (page 1) need to be answered here.

1. EPA Hazardous Waste

a. Please list all USEPA listed and characteristic waste code numbers:

b. Is the material subject to the Alternative Debris standards (40 CFR 268.45)?

☐ Yes ☒ No

c. Is the material subject to the Alternative Soil standards (40 CFR 268.49)? → If Yes, complete question 4.

☐ Yes ☒ No

d. Is the material exempt from Subpart CC Controls (40 CFR 264.1083 and 265.1084)?

☐ Yes ☒ No

→ If Yes, please select one of the following:

☐ Waste has been determined to be LDR exempt [265.1083(c)(4) and 265.1084(c)(4)] based on the fact that it meets all applicable organic treatment standards (including UHCs for D-coded characteristic wastes) or a Specified Technology has been utilized.

☐ Waste does not qualify for a LDR exemption, but the average VOC at the point of origination is <500 ppmw and this determination was based on analytical testing (upload copy of analysis) or generator knowledge.

2. State Hazardous Waste → Please list all state waste codes:

3. Excluded Waste → Please select which of the following categories apply to your material:

☐ Delisted Hazardous Waste

☐ Excluded Waste under 40 CFR 261.4 → Specify Exclusion:

☐ Treated Hazardous Waste Debris

☐ Treated Characteristic Hazardous Waste → If checked, complete question 4.

4. Underlying Hazardous Constituents → Please list all Underlying Hazardous Constituents:

Chromium is present in the metal, but is not expected to be present above the UTS. See Attached.

5. Benzene NESHAP → Please include benzene concentration and percent water/moisture in chemical composition.

a. Are you a TSDF? → If yes, please complete Benzene NESHAP questionnaire. If not, continue.

b. What is your facility's current total annual benzene quantity in Megagrams?

☐ <1 Mg ☐ 1--9.99 Mg ☐ ≥10 Mg

c. Is this waste soil from remediation at a closed facility?

☐ Yes ☐ No

d. Has material been treated to remove 99% of the benzene or to achieve <10 ppmw?

☐ Yes ☐ No

e. Is material exempt from controls in accordance with 40 CFR 61.342?

☐ Yes ☐ No

→ If yes, specify exemption:

f. Based on your knowledge of your waste and the BWON regulations, do you believe that this waste stream is subject to treatment and control requirements at an off-site TSDF?

☐ Yes ☐ No

6. 40 CFR 63 GGGGG → Does the material contain <500 ppw VOHAPs at the point of determination?

☐ Yes ☐ No

7. CERCLA or State-Mandated clean up → Please submit the Record of Decision or other documentation to assist others in the evaluation for proper disposal.

8. NRC or state regulated radioactive or NORM Waste → Please identify Isotopes and pCi/g:

Attachment for Profile Number OR321319

The waste proposed for treatment and disposal under OR321319 consists of 32 drums of material (the "Waste Drums"). In December 2011, the Waste Drums were part of a 40-drum shipment of waste from ATI Wah Chang's ("ATI") facility in Albany, Oregon to the Heritage-WTI, Inc. ("WTI") facility (EPA ID OHD98063541) located at 1250 St. George St. in East Liverpool, Ohio (the "WTI Facility"). The Waste Drums are currently located at the WTI Facility and will be offered for transport from the WTI Facility to Chemical Waste Management of the Northwest ("CWMNW"). The Waste Drums will be prepared for shipment from the WTI Facility and transported to CWMNW by Clean Harbors Environmental Services, Inc. ("Clean Harbors").

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and the material in the Waste Drums should be wet with water soluble oil and coolant / rust inhibitor solution.

However, because of the gravity of the accident at WTI, and in the interests of safety, each of the Waste Drums is presumed to contain dry zirconium powder for the purpose of this waste profile (OR321319).

Prior to shipment from the WTI facility, CHES will prepare each of the Waste Drums for shipment using the following technique. CHES will open each 85-gal drum and fill it with a 37% solution of sodium silicate (MSDS attached) to a level covering the inner 55-gal drum. CHES will then penetrate the lid of the inner 55-gal drum and add additional sodium silicate solution to the inner drum. ATI estimates that the Waste Drums may contain 0 – 30% of the sodium silicate solution. All told, ATI estimates that the volume of free liquids in the drums could range between 25 - 35%. Before shipping the drums to CWMNW, CHES will close each 85-gal drum and place each drum into a 110-gal overpack.

For purposes of transportation and disposal, ATI has tentatively characterized the Waste Drums as D001 ignitable and D003 reactive hazardous waste. Based on its testing of zirconium grinding swarf and its knowledge of the processes that produce that material, ATI believes that the material in the Waste Drums was not a hazardous waste when it was shipped to the WTI Facility for disposal (see attached Veolia profile 434443). However, in response to the accident at the WTI Facility involving this waste and WTI's allegations about the accident, we are profiling the Waste Drums to CWMNW under the D001 and D003 hazardous waste codes. In addition, we request that the Waste Drums be managed for disposal as if they each could contain dry zirconium powder.

WTI will not authorize ATI to collect or analyze samples from the Waste Drums before the drums are shipped to CWMNW. Accordingly, to provide CWMNW with information to evaluate the relative toxicity of the material in the Waste Drums, we collected samples of other zirconium grinding swarf produced by the ATI Precision Finishing facility from zirconium alloy plates similar to the plates used to produce the swarf in the Waste Drums. The TCLP analytical results for those samples, with UHC data, are attached. Based on those data, and our knowledge of the ATI Precision Finishing facility process that produces zirconium grinding swarf, ATI does not believe that the material in the Waste Drums will possess the hazardous characteristic of toxicity.



Oregon

John A. Kitzhaber, MD, Governor

Department of Environmental Quality

Headquarters
811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5696
FAX (503) 229-6124
TTY: 711

July 13, 2012

Peter D. Sax
Stoel Rives, LLP
900 SW Fifth
Portland, OR 97204

Re: Public Records Request
ATI Wah Chang

Dear Mr. Sax:

The records you have requested on June 12, 2012, are enclosed. An invoice for DEQ's fees for compiling and printing the records will be sent under separate cover. If you have any questions, please call me at (503) 229-5950.

Sincerely,

Jeff Bachman
Office of Compliance and Enforcement

Enclosure

cc: Brian Fuller, Western Region, Eugene Office, DEQ

Photocopy and Service Charges

internal document

Oregon DEQ Business Office

811 SW 6th Ave., Portland OR 97204-1390

Date requested: 6/12/12

Date copies made: 6/13/12

Office: HQ-MSD

DEQ Staff contact: Jeff Bachman

Phone: 503-229-5950

Billing: Other (COPY)

If other, specify:

☒ Signed Public Records Request is attached. (Public Records Request is required for any job estimated at more than \$25)

Requester's Name: Peter Sax

Phone: 503-294-9801

Company: Stoel Rives LLP

Address: 900 SW Fifth Ave., Suite 2600

City, State, Zip: Portland OR 97204

Records Requested (you may attach a preprinted list):
attached

☒ Call when copies are ready

☐ Please mail

☐ Check if agency-wide response takes 15 minutes or less (no charge)

ITEMS	QTY	UNIT	EA	TOTAL
Service charge for invoicing (\$5.00)				\$5.00
Outsourced copies – attach documentation			actual	
Copies made @ 25¢ ea.	750	copies @	\$0.25	\$187.50
Oversized copies @ 50¢ ea.		copies @	\$0.50	\$0.00
Color copies @ \$1 ea.		copies @	\$1.00	\$0.00
Archive retrieval charges:				
Standard: 1 st box \$60, each add'l box \$12				
Half-Day Rush: 1 st box \$85, each add'l box \$15				
RUSH: 1 st box \$135, each add'l box \$15				
Labor charge – hard copy reproductions	8.00	hrs @	\$30.00	\$240.00
Labor charge – electronic reproductions		hrs @	\$40.00	\$0.00
Mailing costs (actual or estimated)				
Express mailing (actual or minimum of \$9)				
Other charges (Specify)				\$0.00
TOTAL				\$432.50

Method of payment:

☐ Cash – Receipt No. _____

☐ Check – Check No. _____

☐ Money Order No. _____

☐ Invoice (\$5 service charge will be added)

☐ Fee Waiver No. _____

Receipt No. _____

Receipt No. _____

Waiver Amount _____

ATTN:

☐ Business Office – payment enclosed

☒ Business Office – for invoicing

**NOTE: Prepayment is always required when requester is from out of state
OR if the amount is greater than \$1,000.**



500 S.W. Fifth Avenue, Suite 2600
Portland, Oregon 97204
main 503.224.3380
fax 503.220.2480
www.stoel.com

July 6, 2012

PETER D. SAX
Direct (503) 294-9801
pdsax@stoel.com

VIA UPS DELIVERY

Mr. Brian Fuller
Manager Hazardous & Solid Waste
Oregon Department of Environmental Quality
811 SW 6th Avenue
Portland, OR 97204-1390

Re: **Public Records Request**

Dear Brian:

Thank you for your email response of July 3, 2012. Enclosed please find our approval of the cost estimate of \$455.00.

Thank you in advance for your assistance. Please contact me or my colleague Mark Morford (503-294-9259 or jmmorford@stoel.com) with any questions.

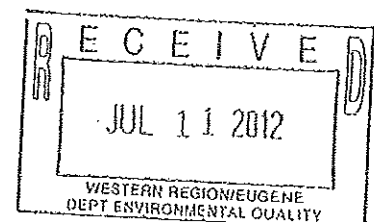
Very truly yours,


Peter D. Sax

PDS/dca
Enclosure

71868979.1 0024961-00011

Alaska California Idaho
Minnesota Oregon Utah Washington



DEPARTMENT OF ENVIRONMENTAL QUALITY
PUBLIC RECORDS REQUEST FORM

Please send completed form to: deqinfo@deq.state.or.us or fax to (503) 229-6124

Date: June 12, 2012

Requestor's Name: Peter Sax

Phone: 503.294.9801

Fax: 503.220.2480

Company: Stool Rives LLP

Address: 900 SW Fifth Ave, Suite 2600

Portland, OR 97204

Records Requested (please print or attach a preprinted list): Please see attached letter

☒ I agree to pay the cost of fulfilling this Public Records Request, according to the rules set forth in OAR 340-011-0310 through 340-110-0390. These costs may include the cost of locating records, reviewing records to delete exempt material, supervising the inspection of records, copying records, certifying records and mailing records, including the cost of searching for records regardless of whether the Department was able to locate the requested records.

IF YOU HAVE A FEE WAIVER, please note: DEQ caps all fee waivers at an amount of \$200 annually (based on the 7/1-6/30 fiscal year). DEQ will bill you for any costs associated with record retrieval, sorting, reviewing or copying above the \$200 threshold. Once the \$200 limit is reached, all records request costs are your responsibility.

☐ My organization has a current fee waiver # .

NOTE: Fee waivers do not apply to photocopies made by an outside vendor (non-DEQ personnel).

☐ My organization is a local, state or federal public/governmental entity acting in a public function.

NOTE: The agency reserves the right to charge for any job based on criteria listed in OAR 340-011-0380.

Signature [Signature]

Date 6/12/12

Per ORS 192.440, for public records requests with an estimated cost of more than \$25, DEQ is required to provide the requestor with a written notification of the estimated amount of the fee. The requestor must then confirm that they want DEQ to proceed with making the records available.

DEQ estimate of job cost: \$ 455.00

Requestor confirmation of receipt of job estimate and authorization to proceed with making records available.

Signature [Signature]

Date 7.6.12

I will pick up: ☐

Please send UPS or FED-EX: ☒

Please send US Mail: ☐

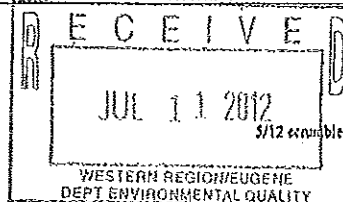
UPS billing number:

FED-EX billing number:

THIS SPACE FOR OFFICE USE ONLY

DEQ Staff Contact: Telephone #: Fax #:

Office: If Headquarters, please identify Division:



**DEPARTMENT OF ENVIRONMENTAL QUALITY
PUBLIC RECORDS REQUEST FORM**

Please send completed form to: deqinfo@deq.state.or.us or fax to (503) 229-6124

Date: June 12, 2012

Requestor's Name: Peter Sax

Phone: 503.294.9801

Fax: 503.220.2480

Company: Stoel Rives LLP

Address: 900 SW Fifth Ave, Suite 2600

Portland, OR 97204

Records Requested (please print or attach a preprinted list): Please see attached letter

☒ I agree to pay the cost of fulfilling this Public Records Request, according to the rules set forth in OAR 340-011-0310 through 340-110-0390. These costs may include the cost of locating records, reviewing records to delete exempt material, supervising the inspection of records, copying records, certifying records and mailing records, including the cost of searching for records regardless of whether the Department was able to locate the requested records.

IF YOU HAVE A FEE WAIVER, please note: DEQ caps all fee waivers at an amount of \$200 annually (based on the 7/1-6/30 fiscal year). DEQ will bill you for any costs associated with record retrieval, sorting, reviewing or copying above the \$200 threshold. Once the \$200 limit is reached, all records request costs are your responsibility.

☐ My organization has a current fee waiver # _____

NOTE: Fee waivers do not apply to photocopies made by an outside vendor (non-DEQ personnel).

☐ My organization is a local, state or federal public/governmental entity acting in a public function.

NOTE: The agency reserves the right to charge for any job based on criteria listed in OAR 340-011-0380.

Signature [Signature]

Date 6/12/12

Per ORS 192.440, for public records requests with an estimated cost of more than \$25, DEQ is required to provide the requestor with a written notification of the estimated amount of the fee. The requestor must then confirm that they want DEQ to proceed with making the records available.

DEQ estimate of job cost: \$ _____

Requestor confirmation of receipt of job estimate and authorization to proceed with making records available.

Signature _____

Date _____

I will pick up: ☐

Please send UPS or FED-EX: ☒

Please send US Mail: ☐

UPS billing number: _____

FED-EX billing number: _____

THIS SPACE FOR OFFICE USE ONLY

DEQ Staff Contact: _____ Telephone #: _____ Fax #: _____

Office: _____ If Headquarters, please identify Division: _____



900 S.W. Fifth Avenue, Suite 2600
Portland, Oregon 97204
main 503.224.3380
fax 503.220.2480
www.stoel.com

June 12, 2012

PETER D. SAX
Direct (503) 294-9801
pdsax@stoel.com

**VIA EMAIL AND CERTIFIED MAIL
(RETURN RECEIPT REQUESTED)**

Mr. Brian Fuller
Manager Hazardous & Solid Waste
Oregon Department of Environmental Quality
811 SW 6th Avenue
Portland, OR 97204-1390

Re: Public Records Request

Dear Brian:

This letter is a request for information from the Oregon Department of Environmental Quality ("DEQ") under DEQ's Public Records Administrative Rule (OAR 340-011-0310 through 0390).

Specifically, I'm writing to request that DEQ provide me with electronic or paper copies of:

- all documents in DEQ's possession related to the disposal of waste, or recycling or other processing of materials from TDY Industries, LLC's (dba ATI Wah Chang) Albany, Oregon facility or ATI Precision Finishing LLC's Rochester, Pennsylvania facility at: (1) Heritage - WTI, Inc. ("WTI"), located in Liverpool, Ohio; and/or (2) AL Solutions Inc., located in New Cumberland, West Virginia (referred to collectively as "the Facilities");
- all documents in DEQ's possession related to the transportation of waste or other materials from ATI Wah Chang to the Facilities, including without limitation, shipments transported by Veolia Environmental Services ("Veolia");
- any contracts or correspondence between Veolia and WTI; and
- all documents that relate to fires, accidents or other workplace incidents at either Facility.



Mr. Brian Fuller
June 12, 2012
Page 2

I promise to pay reasonable fees that DEQ may incur in searching for and providing the requested information, even if the fees charged to provide the requested documents exceed \$25. Please contact me as soon as you receive this request to discuss the fees DEQ expects to incur in responding and to obtain my advance authorization to incur those fees.

I represent a private business and am seeking the requested documents for its use. I look forward to your response within 20 business days of your receipt of this request. If you deny this request in full or in part, please provide reasons why DEQ considers the requested record exempt, as required by OAR 340-011-0390. In addition, please release all reasonably segregable portions of the requested information not subject to an exemption.

Thank you in advance for your prompt consideration and assistance responding to this request. Please contact me or my colleague Mark Morford (503-294-9259 or jmmorford@stoel.com) with any questions.

Very truly yours,

Peter D. Sax

PDS/dea
Enclosure

cc (via email): Sarah Wheeler, DEQ Office of Compliance and Enforcement
Susan Shewczyk, DEQ Hazardous Waste Inspector, Western Division



ATI Wah Chang
1600 Old Salem Road
P.O. Box 460
Albany, OR 97321-0460
Tel: 541-926-4211
Fax: 541-967-6990
www.ATImetals.com

July 18, 2012

Mr. Brian Fuller
Oregon Department of Environmental Quality, Western Region
750 Front Street NE, Suite 120
Salem, OR 97301-1039

Re: Zirconium Wastes

Dear Brian:

I am responding to your letter of June 13, 2012 in which you requested additional information about the zirconium wastes for which DEQ granted ATI Wah Chang a 30-day extension to the 90-day generator accumulation period. Thank you again for accommodating our request for the extension.

In your letter, you requested the following information about the wastes subject to the extension:

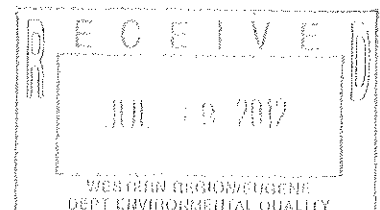
1. A list of the drums with weights.
2. A brief description of how the waste was generated.
3. A copy of the disposal manifest(s).

This letter provides the information you requested. The letter begins by describing how the wastes subject to the extension were generated. It then addresses your request for a list of the drum weights and disposal manifests.

Zirconium Fines Waste Descriptions

The wastes in question contain zirconium fines and are generated by four types of processes. Three of the four waste streams are from wet processes and generate wastes that we maintain in a wet condition; the other waste stream is dry and is maintained in a dry condition. The following paragraphs summarize the four waste streams:

A. *Honing Sludge (Clean Harbors Profile CH 561515).* Honing sludge is generated by high friction honing of zirconium tubes. During the honing process, metal fines are created by polishing from the inside of a seamless metal tube. The metal tubes being honed and the metal fines generated during the honing process are saturated with a heavy petroleum-based lubricant



Mr. Brian Fuller

July 18, 2012

Page 2

called honing oil. This waste stream includes zirconium fines (it may also contain low concentrations of hafnium, niobium and titanium), abrasive media (such as garnet, silica, aluminum oxide, ceramics and adhesive polymers), honing oil and filter paper.

B. *Rotoclone Sludge*- (*Clean Harbors Profile CH 566614*). Rotoclone sludge consists of fines generated by high friction metal sanding processes. The fines from the sanding processes are captured in an air pollution control device called a Rotoclone, which mixes the solid materials with water, settles out the solids and emits the cleaned exhaust gas. This waste stream includes zirconium fines (it may also contain low concentrations of hafnium, niobium and titanium), abrasive media (such as garnet, silica, aluminum oxide, ceramics and adhesive polymers) and water.

C. *Zirconium Fines from Other Wet Metal Finishing Processes*- (*Clean Harbors Profiles CH120512 & CH120512-1*). Wah Chang generates zirconium fines from other metal finishing processes that use water-based coolant and lubricant. These processes include grinding, sawing and sanding and they produce fine particulate and thin shavings or ribbons. Wastes in this stream can have the consistency of gritty mud or gritty, wet felt. This waste stream includes zirconium fines (it may also contain low concentrations of hafnium, niobium and titanium), abrasive media (such as garnet, silica, aluminum oxide, ceramics and adhesive polymers), water and water-based coolant or lubricant (currently Hangsterfer's S-500 CF), filter paper, paper filter cartridges, and plastic bags containing small batches of the waste. At the direction of our disposal vendor, Clean Harbors Environmental Services, Inc. ("Clean Harbors"), decided drums containing this waste stream that do not include filter paper or paper filter cartridges are managed under profile CH120512. Drums that do contain filter paper or cartridges are managed under a separate profile, CH120512-1.

D. *Floor Sweepings* (*Clean Harbors Profile CH561493*) . This waste stream is generated by sweeping and other housekeeping tasks in the Powder Met Department. This department produces dry zirconium powder as a product. Routine housekeeping activities collect zirconium powder mixed with the sundry other dust and debris that collects on the floor and other surfaces in this department. This waste stream includes zirconium fines (it may also contain low concentrations of hafnium, niobium and titanium) and non-metallic dry, inert debris (such as dirt, ear plugs, paper cups, broken wooden pallets or used absorbent materials).

Mr. Brian Fuller

July 18, 2012

Page 3

As you know, the wastes subject to the extension were repackaged by Clean Harbors for incineration between June 17- and 27, 2012. To prepare the wastes for incineration, Clean Harbors required that the wastes be repackaged into 30-gallon plastic drums containing no more than 100 lbs of metal per drum (not counting the weight of any non-metal waste inside). Given the relatively small amount of metal inside drums containing filter paper and filter cartridges, Clean Harbors decided to manage drums containing those wastes under a separate profile, CH120512-1, and authorized its personnel to repack those wastes into 30-gallon plastic drums holding up to 200 lbs (counting the weight of any metal and non-metal waste inside).

With the exception of the four drums of dry floor sweepings managed under CH561493, all of the 30-gallon plastic drums contained sodium silicate solution. Because the plastic drums, selected for incineration, were not rated for liquids, Clean Harbors decided to package all of the 30-gallon plastic drums into 55-gallon steel drums rated for liquids. Clean Harbors completed that work on July 13, 2012. All told, Clean Harbors packed 698 55-gallon steel drums containing wastes subject to the extension.

List of Drums, Weights and Manifest Copies

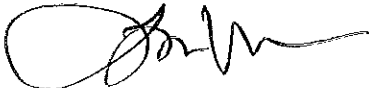
The attached spreadsheet (Attachment A) lists the 698 drums, their weights (as packed for transport) and their contents (as matched to the Clean Harbors profiles described above). Copies of the manifests that accompanied the drums during their shipment for disposal are attached (Attachment B).

As is reflected on the manifests, Wah Chang conservatively characterized the wastes subject to the 90-day generator accumulation extension as D001 ignitable and D003 reactive hazardous wastes. Based on its historical testing of similar wastes generated in its metal working processes, Wah Chang does not believe that these wastes are actually hazardous. Wah Chang intends to complete a thorough analysis of these wastes and the hazardous characteristics that they may or may not possess. Based on the results of that analysis, Wah Chang may reconsider whether future batches of these wastes should be managed as ignitable or reactive hazardous wastes.

Mr. Brian Fuller
July 18, 2012
Page 4

Please let me know if you have additional questions about the wastes subject to the extension.

Sincerely,

A handwritten signature in black ink, appearing to read 'Lee Weber', with a large, stylized initial 'L'.

Lee Weber

cc: Jim Denham
Lauren McAndrews
John Tishok
J. Mark Morford

Attachment A

(Drums and Weights)



Date: June 2012

Zr Fines Inventory for Clean Harbors Incinerator

Line #	Total weight - Pounds	Profile #
1	145	1
2	155	1
3	147	1
4	145	1
5	150	1
6	140	1
7	153	1
8	200	2
9	124	1
10	139	1
11	155	3
12	155	3
13	155	3
14	155	3
15	155	3
16	155	1
17	155	2
18	155	1
19	155	1
20	155	1
21	155	3
22	155	3
23	155	3
24	155	3
25	155	3
26	155	1
27	180	1
28	155	1
29	131	1
30	165	2
31	195	2
32	154	1
33	255	2
34	238	2
35	140	1
36	155	3
37	155	3
38	155	3
39	155	3
40	155	3
41	255	2

1 Zr Fines & Other	CH 1205121
2 Zr Fines w/filter paper	CH 1205121-1
3 Honing Sludge	CH 561515
4 Rotoclone Sludge	CH 566614
5 Floor Sweepings	CH 561493

42	147	1
43	141	1
44	155	1
45	154	1
46	166	2
47	155	3
48	155	3
49	155	3
50	155	3
51	155	4
52	255	2
53	155	1
54	150	1
55	249	2
56	155	1
57	143	1
58	155	1
59	125	1
60	155	1
61	153	1
62	215	2
63	154	1
64	155	1
65	140	1
66	155	3
67	155	3
68	155	3
69	155	3
70	155	3
71	243	2
72	140	1
73	155	1
74	255	2
75	155	5
76	241	2
77	195	2
78	147	1
79	203	2
80	141	1
81	155	3
82	155	3
83	155	3
84	155	3
85	155	3
86	155	3
87	155	3
88	155	3
89	155	3
90	155	3

1 Zr Fines & Other	CH 1205121
2 Zr Fines w/filter paper	CH 1205121-1
3 Honing Sludge	CH 561515
4 Rotoclone Sludge	CH 566614
5 Floor Sweepings	CH 561493

91	155	1
92	131	1
93	155	1
94	149	1
95	153	1
96	155	3
97	155	3
98	155	3
99	155	3
100	155	3
101	130	1
102	155	1
103	143	1
104	147	1
105	155	1
106	155	3
107	155	3
108	155	3
109	255	2
110	155	3
111	155	3
112	155	3
113	155	3
114	155	3
115	155	3
116	155	3
117	155	3
118	155	3
119	155	3
120	155	3
121	155	3
122	155	3
123	155	3
124	155	3
125	155	3
126	151	1
127	147	1
128	151	1
129	155	1
130	155	1
131	155	1
132	155	1
133	150	1
134	153	1
135	144	1
136	151	1
137	154	1
138	149	1
139	152	1

1 Zr Fines & Other	CH 1205121
2 Zr Fines w/filter paper	CH 1205121-1
3 Honing Sludge	CH 561515
4 Rotoclone Sludge	CH 566614
5 Floor Sweepings	CH 561493

140	149	1
141	131	1
142	143	1
143	215	2
144	155	1
145	140	1
146	238	2
147	118	1
148	148	1
149	255	2
150	155	1
151	155	3
152	155	1
153	155	3
154	155	3
155	235	2
156	155	3
157	155	3
158	155	3
159	155	3
160	155	3
161	155	3
162	155	3
163	155	3
164	155	3
165	155	3
166	155	3
167	155	3
168	155	3
169	155	3
170	155	3
171	220	2
172	142	1
173	140	1
174	205	2
175	155	1
176	155	3
177	155	3
178	155	3
179	155	3
180	155	3
181	151	1
182	120	1
183	152	1
184	137	1
185	153	1
186	146	1
187	131	1
188	155	1

1 Zr Fines & Other	CH 1205121
2 Zr Fines w/filter paper	CH 1205121-1
3 Honing Sludge	CH 561515
4 Rotoclone Sludge	CH 566614
5 Floor Sweepings	CH 561493

189	155	1
190	152	1
191	155	3
192	155	3
193	155	3
194	155	3
195	155	3
196	135	1
197	125	1
198	145	1
199	137	1
200	143	1
201	155	3
202	155	3
203	155	3
204	155	3
205	155	3
206	147	1
207	143	1
208	155	1
209	155	1
210	155	1
211	152	1
212	148	1
213	130	1
214	155	1
215	149	1
216	130	1
217	145	1
218	135	1
219	113	1
220	136	1
221	155	3
222	155	3
223	155	3
224	147	3
225	145	3
226	155	3
227	155	3
228	155	3
229	155	3
230	155	3
231	190	2
232	153	1
233	195	2
234	225	2
235	155	1
236	155	3
237	155	3

1 Zr Fines & Other CH 1205121
 2 Zr Fines w/filter paper CH 1205121-1
 3 Honing Sludge CH 561515
 4 Rotoclone Sludge CH 566614
 5 Floor Sweepings CH 561493

238	155	3
239	155	3
240	155	3
241	153	1
242	145	1
243	153	1
244	152	1
245	140	1
246	153	3
247	155	3
248	154	3
249	155	3
250	153	3
251	155	1
252	140	1
253	135	1
254	187	2
255	151	1
256	155	1
257	151	1
258	155	1
259	155	1
260	155	1
261	155	3
262	155	3
263	155	3
264	155	3
265	238	2
266	155	3
267	155	3
268	155	3
269	155	3
270	141	1
271	255	2
272	201	2
273	255	2
274	241	2
275	118	1
276	155	3
277	155	3
278	155	3
279	155	3
280	155	3
281	148	1
282	155	1
283	130	1
284	148	1
285	212	2
286	235	2

1 Zr Fines & Other	CH 1205121
2 Zr Fines w/filter paper	CH 1205121-1
3 Honing Sludge	CH 561515
4 Rotoclone Sludge	CH 566614
5 Floor Sweepings	CH 561493

287	225	2
288	195	2
289	205	2
290	215	2
291	155	1
292	141	1
293	220	2
294	152	1
295	254	2
296	140	1
297	155	1
298	155	1
299	144	1
300	155	1
301	255	2
302	255	2
303	248	2
304	255	2
305	186	2
306	255	2
307	149	1
308	252	2
309	242	2
310	130	1
311	255	2
312	221	2
313	220	2
314	205	2
315	215	2
316	143	1
317	155	1
318	143	1
319	153	1
320	140	1
321	155	3
322	155	3
323	155	3
324	155	3
325	155	3
326	215	2
327	236	2
328	225	2
329	255	2
330	255	2
331	126	1
332	255	2
333	155	1
334	130	1
335	215	2

1 Zr Fines & Other	CH 1205121
2 Zr Fines w/filter paper	CH 1205121-1
3 Honing Sludge	CH 561515
4 Rotoclone Sludge	CH 566614
5 Floor Sweepings	CH 561493

336	125	1
337	155	1
338	125	1
339	149	1
340	127	1
341	222	2
342	222	2
343	234	2
344	240	2
345	234	2
346	140	1
347	150	1
348	130	1
349	140	1
350	152	1
351	245	2
352	195	2
353	225	2
354	205	2
355	251	2
356	254	2
357	155	1
358	200	2
359	225	2
360	250	2
361	192	2
362	230	2
363	214	2
364	222	2
365	210	2
366	246	2
367	240	2
368	188	2
369	252	2
370	196	2
371	250	2
372	223	2
373	218	2
374	226	2
375	210	2
376	250	2
377	149	1
378	239	2
379	179	2
380	227	2
381	227	2
382	210	2
383	223	2
384	219	2

1 Zr Fines & Other	CH 1205121
2 Zr Fines w/filter paper	CH 1205121-1
3 Honing Sludge	CH 561515
4 Rotoclone Sludge	CH 566614
5 Floor Sweepings	CH 561493

385	255	2
386	165	2
387	155	1
388	158	2
389	162	2
390	140	1
391	220	2
392	225	2
393	254	2
394	250	2
395	225	2
396	135	1
397	143	1
398	145	1
399	155	1
400	155	1
401	255	2
402	225	2
403	215	2
404	205	2
405	240	2
406	145	1
407	155	2
408	195	1
409	190	2
410	240	2
411	140	1
412	135	1
413	155	1
414	155	1
415	147	1
416	236	2
417	221	2
418	213	2
419	216	2
420	212	2
421	207	2
422	252	2
423	255	2
424	237	2
425	228	2
426	129	1
427	147	1
428	155	1
429	122	1
430	155	1
431	125	1
432	145	1
433	155	1

1 Zr Fines & Other	CH 1205121
2 Zr Fines w/filter paper	CH 1205121-1
3 Honing Sludge	CH 561515
4 Rotoclone Sludge	CH 566614
5 Floor Sweepings	CH 561493

434	140	1
435	145	1
436	187	2
437	201	2
438	203	2
439	255	2
440	189	2
441	145	1
442	145	1
443	142	1
444	141	1
445	130	1
446	136	1
447	123	1
448	155	1
449	153	1
450	118	1
451	150	1
452	152	1
453	139	1
454	155	1
455	135	1
456	221	2
457	252	2
458	255	2
459	245	2
460	238	2
461	223	2
462	210	2
463	228	2
464	206	2
465	223	2
466	155	1
467	155	1
468	117	1
469	108	1
470	147	1
471	255	2
472	252	2
473	243	2
474	205	2
475	191	2
476	155	1
477	155	1
478	158	1
479	150	1
480	150	1
481	231	2
482	218	2

1 Zr Fines & Other CH 1205121
 2 Zr Fines w/filter paper CH 1205121-1
 3 Honing Sludge CH 561515
 4 Rotocloner Sludge CH 566614
 5 Floor Sweepings CH 561493

483	239	2
484	239	2
485	187	2
486	220	2
487	155	1
488	260	2
489	151	1
490	154	1
491	195	2
492	245	2
493	180	2
494	227	2
495	211	2
496	249	2
497	241	2
498	241	2
499	226	2
500	255	2
501	243	2
502	245	2
503	223	2
504	232	2
505	226	2
506	228	2
507	213	2
508	224	2
509	240	2
510	233	2
511	239	2
512	255	2
513	243	2
514	230	2
515	242	2
516	155	1
517	144	1
518	155	1
519	155	1
520	152	1
521	190	2
522	233	2
523	211	2
524	245	2
525	254	2
526	155	1
527	155	1
528	145	1
529	152	1
530	129	1
531	244	2

1 Zr Fines & Other	CH 1205121
2 Zr Fines w/filter paper	CH 1205121-1
3 Honing Sludge	CH 561515
4 Rotoclone Sludge	CH 566614
5 Floor Sweepings	CH 561493

532	247	2
533	243	2
534	245	2
535	255	2
536	250	2
537	237	2
538	211	2
539	225	2
540	224	2
541	155	5
542	155	3
543	95	1
544	155	5
545	153	1
546	155	1
547	134	1
548	155	1
549	149	1
550	255	2
551	155	1
552	245	2
553	235	2
554	206	2
555	153	1
556	255	2
557	155	1
558	154	1
559	247	2
560	153	1
561	155	1
562	155	1
563	149	1
564	160	1
565	150	1
566	145	1
567	153	1
568	155	1
569	155	1
570	155	1
571	155	1
572	155	1
573	154	1
574	143	1
575	155	1
576	155	1
577	155	1
578	155	1
579	155	1
580	153	1

1 Zr Fines & Other	CH 1205121
2 Zr Fines w/filter paper	CH 1205121-1
3 Honing Sludge	CH 561515
4 Rotoclone Sludge	CH 566614
5 Floor Sweepings	CH 561493

581	155	1
582	153	1
583	155	1
584	155	1
585	129	1
586	155	1
587	175	2
588	228	2
589	215	2
590	155	1
591	154	1
592	255	2
593	154	1
594	140	1
595	148	1
596	150	1
597	155	1
598	155	1
599	154	1
600	149	1
601	155	1
602	155	1
603	155	1
604	155	1
605	147	1
606	155	1
607	155	1
608	155	1
609	155	1
610	126	1
611	135	1
612	155	1
613	125	1
614	155	1
615	155	1
616	145	1
617	155	1
618	150	1
619	130	1
620	255	2
621	255	2
622	185	2
623	255	2
624	232	2
625	155	1
626	155	1
627	155	1
628	155	1
629	131	1

1 Zr Fines & Other	CH 1205121
2 Zr Fines w/filter paper	CH 1205121-1
3 Honing Sludge	CH 561515
4 Rotoclone Sludge	CH 566614
5 Floor Sweepings	CH 561493

630	155	1
631	150	1
632	155	1
633	155	1
634	155	1
635	151	1
636	152	1
637	155	1
638	155	1
639	155	1
640	155	3
641	155	3
642	155	3
643	155	3
644	155	3
645	155	1
646	156	1
647	155	3
648	155	3
649	155	3
650	155	3
651	155	3
652	155	3
653	155	3
654	155	3
655	155	3
656	155	3
657	155	3
658	155	3
659	155	3
660	155	3
661	155	3
662	155	3
663	155	3
664	155	3
665	155	3
666	155	3
667	155	3
668	155	3
669	155	3
670	155	3
671	155	3
672	155	3
673	155	4
674	155	3
675	155	3
676	155	4
677	155	3
678	155	3

1 Zr Fines & Other	CH 1205121
2 Zr Fines w/filter paper	CH 1205121-1
3 Honing Sludge	CH 561515
4 Rotoclone Sludge	CH 566614
5 Floor Sweepings	CH 561493

679	155	3
680	155	3
681	155	3
682	155	3
683	155	3
684	155	3
685	155	3
686	155	3
687	235	1
688	235	2
689	235	2
690	235	2
691	235	2
692	155	3
693	155	3
694	155	3
695	155	3
696	155	3
697	155	5
698	155	3

1 Zr Fines & Other	CH 1205121
2 Zr Fines w/filter paper	CH 1205121-1
3 Honing Sludge	CH 561515
4 Rotoclone Sludge	CH 566614
5 Floor Sweepings	CH 561493

Attachment B
(Manifest Copies)

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number ORD050955848	2. Page 1 of 1	3. Emergency Response Phone (800) 403-3718	4. Manifest Tracking Number 005329197	FLE	
5. Generator's Name and Mailing Address Wah Chang 1600 Old Salem Road Ne Albany, OR 97321		Generator's Site Address (if different than mailing address) SAME					
Generator's Phone:							
6. Transporter 1 Company Name Clean Harbors Environmental Services Inc		U.S. EPA ID Number MAD039022250					
7. Transporter 2 Company Name		U.S. EPA ID Number					
8. Designated Facility Name and Site Address Clean Harbors El Dorado LLC 309 American Circle El Dorado, AR 71730		U.S. EPA ID Number ARD009748192					
Facility's Phone: (870) 063-7173							
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
x	1. RO, UN3189, WASTE METAL POWDER, SELF-HEATING, N.O.S., (CONTAINS ZIRCONIUM), 4.2, PG II (0001 0003)	31	Dm	4645	P	0001	0003
x	2. RO, UN3189, WASTE METAL POWDER, SELF-HEATING, N.O.S., (ZIRCONIUM MIXTURE), 4.2, PG II (0001 0003)	13	Dm	2103	P	0001	0003
x	3. RO, UN3189, WASTE METAL POWDER, SELF-HEATING, N.O.S., (ZIRCONIUM MIXTURE), 4.2, PG II (0001 0003)	54	Dm	8336	P	0001	0003
	4.						
14. Special Handling Instructions and Additional Information 1. CH120512 ER05135 2. CH120512-1 ER05135 3. CH1561505 ER05135							
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.							
Generator's/Offeror's Printed/Typed Name Wah Chang		Signature [Signature]				Month Day Year 07 16 12	
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit: Date leaving U.S.:					
Transporter signature (for exports only):							
17. Transporter Acknowledgment of Receipt of Material's							
Transporter 1 Printed/Typed Name [Name]		Signature [Signature]				Month Day Year [Month] [Day] [Year]	
Transporter 2 Printed/Typed Name		Signature [Signature]				Month Day Year [Month] [Day] [Year]	
18. Discrepancy							
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection							
18b. Alternate Facility (or Generator)		Manifest Reference Number: U.S. EPA ID Number					
Facility's Phone:							
18c. Signature of Alternate Facility (or Generator)		[Signature]				Month Day Year [Month] [Day] [Year]	
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)							
1. H040		2. H040		3. H040		4.	
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a							
Printed/Typed Name		Signature				Month Day Year [Month] [Day] [Year]	

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number			
		OR D050755848	1.	(800) 465-3718	005329088 FLE			
5. Generator's Name and Mailing Address		Generator's Site Address (if different than mailing address)						
Wah Chang 1600 Old Salem Road NE Albany, OR 97321		SAME						
Generator's Phone:								
6. Transporter 1 Company Name		U.S. EPA ID Number						
Clean Harbors Environmental Services Inc		MAUG39722250						
7. Transporter 2 Company Name		U.S. EPA ID Number						
8. Designated Facility Name and Site Address		U.S. EPA ID Number						
Clean Harbors El Dorado LLC 309 American Circle El Dorado, AR 71730		ARD069748192						
Facility's Phone:		18701863-7173						
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt/Vol.	13. Waste Codes	
			No.	Type				
	x	1. RQ, UN3189, WASTE METAL POWDER, SELF-HEATING, N.O.S., (CONTAINS ZIRCONIUM), 4.2, PG II (D001 D003)	48	DM	6975	P	D001	D003
	x	2. RQ, UN3189, WASTE METAL POWDER, SELF-HEATING, N.O.S., (ZIRCONIUM MIXTURE), 4.2, PG II (D001 D003)	19	DM	4240	P	D001	D003
	x	3. RQ, UN3189, WASTE METAL POWDER, SELF-HEATING, N.O.S., (ZIRCONIUM MIXTURE), 4.2, PG II (D001 D003)	33	DM	5102	P	D001	D003
x	4. RQ, UN3189, WASTE METAL POWDER, SELF-HEATING, N.O.S., (ZIRCONIUM MIXTURE), 4.2, PG II (D001 D003)	Ø	DM	Ø	P	D001	D003	
14. Special Handling Instructions and Additional Information								
1. CH120512 ERG#135								
2. CH120512-1 ERG#135								
3. CH561515 ERG#135								
4. CH561492 ERG#135								
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.								
Generator's/Offor's Printed/Typed Name			Signature			Month Day Year		
						107/13/12		
TRANSPORTER	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Date leaving U.S.:							
	Transporter signature (for exports only):							
	17. Transporter Acknowledgment of Receipt of Material's							
	Transporter 1 Printed/Typed Name Signature Month Day Year							
DESIGNATED FACILITY	Transporter 2 Printed/Typed Name Signature Month Day Year							
	18. Discrepancy							
	18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection							
	18b. Alternate Facility (or Generator) Manifest Reference Number: U.S. EPA ID Number							
Facility's Phone:								
18c. Signature of Alternate Facility (or Generator) Month Day Year								
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)								
1. H040		2. H040		3. H040		4. H040		
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a								
Printed/Typed Name			Signature			Month Day Year		

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number			
		ORD050955848	1	(800) 433-3718	005329090			
5. Generator's Name and Mailing Address		Generator's Site Address (if different than mailing address)						
Woh Chang 1600 Old Salem Road Re Albany, OR 97321		SAME						
Generator's Phone:								
6. Transporter 1 Company Name		U.S. EPA ID Number						
Clean Harbors Environmental Services Inc		MAD039322250						
7. Transporter 2 Company Name		U.S. EPA ID Number						
8. Designated Facility Name and Site Address		U.S. EPA ID Number						
Clean Harbors El Dorado LLC 309 American Circle El Dorado, AR 71730		ARD069748192						
Facility's Phone:		0701893-7173						
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
			No.	Type				
	X	1. RC, UN3189, WASTE METAL POWDER, SELF-HEATING, N.O.S. (CONTAINS ZIRCONIUM), 4.2, PG II (D001 D003)	22	DM	3112	P	D001	D003
	X	2. RC, UN3189, WASTE METAL POWDER, SELF-HEATING, N.O.S. (ZIRCONIUM MIXTURE), 4.2, PG II (D001 D003)	53	DM	11882	P	D001	D003
	X	3. RC, UN3189, WASTE METAL POWDER SELF-HEATING, N.O.S. (ZIRCONIUM MIXTURE), 4.2, PG II (D001 D003)	25	DM	3875	P	D001	D003
	4.							
14. Special Handling Instructions and Additional Information								
1. CH120512 ERG#135								
2. CH120512-1 ERG#135								
3. CH120513 ERG#135								
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.								
Generator's/Offeror's Printed/Typed Name								
Signature								
Month Day Year								
TRANSPORTER INTL	16. International Shipments							
	<input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Date leaving U.S.:							
	Transporter signature (for exports only):							
	17. Transporter Acknowledgment of Receipt of Materials							
TRANSPORTER	Transporter 1 Printed/Typed Name							
	Signature							
	Month Day Year							
	Transporter 2 Printed/Typed Name							
Signature								
Month Day Year								
DESIGNATED FACILITY	18. Discrepancy							
	18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection							
	18b. Alternate Facility (or Generator)							
	Manifest Reference Number: U.S. EPA ID Number							
Facility's Phone:								
18c. Signature of Alternate Facility (or Generator)								
Month Day Year								
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)								
1. H040 2. H040 3. H040 4.								
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a								
Printed/Typed Name								
Signature								
Month Day Year								

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number DRD050955848	2. Page 1 of 1	3. Emergency Response Phone (800) 483-3718	4. Manifest Tracking Number 005329087 FLE			
5. Generator's Name and Mailing Address Wah Chang 1600 Old Salem Road No Albany, OR 97321			Generator's Site Address (if different than mailing address) SAME					
Generator's Phone: (503) 863-7173			U.S. EPA ID Number MA0000022250					
6. Transporter 1 Company Name Clean Harbors Environmental Services Inc			U.S. EPA ID Number					
7. Transporter 2 Company Name			U.S. EPA ID Number					
8. Designated Facility Name and Site Address Clean Harbors El Dorado LLC 309 American Circle El Dorado, AR 71730			U.S. EPA ID Number ARD060748102					
Facility's Phone: (870) 863-7173								
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type		11. Total Quantity	12. Unit Wt/Vol.	13. Waste Codes	
	X	1. RQ, UN3189, WASTE METAL POWDER, SELF-HEATING, N.O.S., (ZIRCONIUM MIXTURE), 4.2, PG II (D001 D003)	52	DM	11,733	P	D001	D003
	X	2. RQ, UN3189, WASTE METAL POWDER, SELF-HEATING, N.O.S., (CONTAINS ZIRCONIUM), 4.2, PG II (D001 D003)	37	DM	5499	P	D001	D003
	X	3. RQ, UN3189, WASTE METAL POWDER, SELF-HEATING, N.O.S., (ZIRCONIUM MIXTURE), 4.2, PG II (D001 D003)	10	DM	1550	P	D001	D003
	X	4. RQ, UN3189, WASTE METAL POWDER, SELF-HEATING, N.O.S., (ZIRCONIUM MIXTURE), 4.2, PG II (D001 D003)	1	DM	155	P	D001	D003
14. Special Handling Instructions and Additional Information 1. CH120512-1 ERG#135 2. CH120512 ERG#135 3. CH561515 ERG#135 4. CH561493 ERG#135								
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.								
Generator's/Offeror's Printed/Typed Name <i>Wah Chang</i>			Signature <i>Wah Chang</i>			Month Day Year 7 12 12		
TRANSPORTER	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit: _____ Date leaving U.S.: _____					
	17. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name <i>David C. L...</i> Signature <i>David C. L...</i> Month Day Year 7 12 12							
	Transporter 2 Printed/Typed Name Signature Month Day Year							
DESIGNATED FACILITY	18. Discrepancy 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection Manifest Reference Number: _____							
	18b. Alternate Facility (or Generator)				U.S. EPA ID Number			
	Facility's Phone:							
	18c. Signature of Alternate Facility (or Generator)				Month Day Year			
	19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) 1. H040 2. H040 3. H040 4. H040							
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a Printed/Typed Name Signature Month Day Year								

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number ORD050955R4H	2. Page 1 of 1	3. Emergency Response Phone 18001483371	4. Manifest Tracking Number 005323089	FLE	
5. Generator's Name and Mailing Address Wah Chang 1600 Old Salem Road No Albany, OR 97321		Generator's Site Address (if different than mailing address) SAME					
6. Transporter 1 Company Name Clean Harbors Environmental Services Inc		U.S. EPA ID Number MAD039322280					
7. Transporter 2 Company Name		U.S. EPA ID Number					
8. Designated Facility Name and Site Address Clean Harbors El Dorado LLC 309 American Circle El Dorado, AR 71730		U.S. EPA ID Number ARD069748192					
Facility's Phone: 87018637173							
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt/Vol.	13. Waste Codes	
		No.	Type				
X	1. RQ, UN3189, WASTE METAL POWDER, SELF-HEATING, N.O.S., (ZIRCONIUM MIXTURE), 4.2, PG II (D001 D003)	43	DM	9922	P	D001	D003
X	2. RQ, UN3189, WASTE METAL POWDER, SELF-HEATING, N.O.S., (CONTAINS ZIRCONIUM), 4.2, PG II (D001 D003)	47	DM	6323	P	D001	D003
X	3. RQ, UN3189, WASTE METAL POWDER, SELF-HEATING, N.O.S., (ZIRCONIUM MIXTURE), 4.2, PG II (D001 D003)	10	DM	1550	P	D001	D003
X	4. RQ, UN3189, WASTE METAL POWDER, SELF-HEATING, N.O.S., (ZIRCONIUM MIXTURE), 4.2, PG II (D001 D003)	Ø	DM	Ø	P	D001	D003
14. Special Handling Instructions and Additional Information 1. CH120512-1 EPC#135 2. CH120512 EPC#135 3. CH561515 EPC#135 4. CH561495 EPC#135							
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.							
Generator's/Officer's Printed/Typed Name Ryan Bodily		Signature <i>Ryan Bodily</i>			Month Day Year 07/12/12		
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit: Date leaving U.S.:					
17. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name <i>John A. Allen, Jr.</i> Signature <i>John A. Allen, Jr.</i> Month Day Year 7/12/12 Transporter 2 Printed/Typed Name Signature Month Day Year							
18. Discrepancy 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection 18b. Alternate Facility (or Generator) Manifest Reference Number: U.S. EPA ID Number Facility's Phone: 18c. Signature of Alternate Facility (or Generator) Month Day Year							
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) 1. H040 2. H040 3. H040 4. H040							
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a Printed/Typed Name Signature Month Day Year							

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number	FLE				
5. Generator's Name and Mailing Address Wah Chang 1500 Old Satom Road N Albany, OR 97321		Generator's Site Address (if different than mailing address) SAME								
Generator's Phone:		6. Transporter 1 Company Name Clean Harbors Environmental Services Inc		U.S. EPA ID Number MAD030322250						
7. Transporter 2 Company Name				U.S. EPA ID Number						
8. Designated Facility Name and Site Address Clean Harbors El Dorado LLC 309 American Circle El Dorado, AR 71730		Facility's Phone: (870) 863-7173		U.S. EPA ID Number ARD089748192						
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))		10. Containers		11. Total Quantity	12. Unit Wt/Vol	13. Waste Codes		
				No.	Type					
	X	1. HQ, UN3189, WASTE METAL POWDER, SELF-HEATING, N.O.S., (ZIRCONIUM MIXTURE), 4.2, PG II (D001 D003)		11	DM	2323	P	D001	D003	
	X	2. HQ, UN3189, WASTE METAL POWDER, SELF-HEATING, N.O.S., (CONTAINS ZIRCONIUM), 4.2, PG II (D001 D003)		40	DM	3146	P	D001	D003	
	X	3. HQ, UN3189, WASTE METAL POWDER, SELF-HEATING, N.O.S., (ZIRCONIUM MIXTURE), 4.2, PG II (D001 D003)		46	DM	7841	P	D001	D003	
X	4. HQ, UN3189, WASTE METAL POWDER, SELF-HEATING, N.O.S., (ZIRCONIUM MIXTURE), 4.2, PG II (D001 D003)		3	DM	465	P	D001	D003		
14. Special Handling Instructions and Additional Information 1. CH120512-1 ERG#135 2. CH120512 ERG#135 3. CH561515 ERG#135 4. CH561493 ERG#135										
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.										
Generator's/Officer's Printed/Typed Name Signature Month Day Year 07 09 12										
TRANSPORTER	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Transporter signature (for exports only): Date leaving U.S.:									
	17. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name Signature Month Day Year Richard Durham 07 09 12 Transporter 2 Printed/Typed Name Signature Month Day Year									
DESIGNATED FACILITY	18. Discrepancy									
	18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection									
	18b. Alternate Facility (or Generator) Manifest Reference Number: U.S. EPA ID Number									
	Facility's Phone: 18c. Signature of Alternate Facility (or Generator) Month Day Year									
	19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) 1. H040 2. H040 3. H040 4. H040									
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a Printed/Typed Name Signature Month Day Year										

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number ORD060955848	2. Page 1 of 1	3. Emergency Response Phone (800) 483-3718	4. Manifest Tracking Number 005329074	FLE	
5. Generator's Name and Mailing Address Wah Chung 1600 Old Sulton Road No Albany, OR 97321			Generator's Site Address (if different than mailing address) SAME				
6. Transporter 1 Company Name Clean Harbor Environmental Services Inc.			U.S. EPA ID Number WA0030322250				
7. Transporter 2 Company Name Steve Forler Trucking			U.S. EPA ID Number WA000901263				
8. Designated Facility Name and Site Address Clean Harbor El Dorado LLC 308 American Circle El Dorado, AR 71730			U.S. EPA ID Number ARD069748192				
Facility's Phone: (870) 863-7173							
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	X	1. RG, UN3189, WASTE METAL POWDER, SELF-HEATING, N.O.S., (ZIRCONIUM MIXTURE), 4.2, PG II (D001 D003)	19	DM	5286	P	D001 D003
	X	2. RG, UN3189, WASTE METAL POWDER, SELF-HEATING, N.O.S., (CONTAINS ZIRCONIUM), 4.2, PG II (D001 D003)	77	DM	11239	P	D001 D003
	X	3. RG, UN3189, WASTE METAL POWDER, SELF-HEATING, N.O.S., (ZIRCONIUM MIXTURE), 4.2, PG II (D001 D003)	1	DM	155	P	D001 D003
	X	4. RG, UN3189, WASTE METAL POWDER, SELF-HEATING, N.O.S., (ZIRCONIUM MIXTURE), 4.2, PG II (D001 D003)	3	DM	405	P	D001 D003
14. Special Handling Instructions and Additional Information 1. CH120512-1 ERG#135 2. CH120512 ERG#135 3. CH561515 ERG#135 4. CH561593 ERG#135							
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.							
Generator's/Offoror's Printed/Typed Name: _____ Signature: _____ Month: _____ Day: _____ Year: _____							
TRANSPORTER	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____						
	17. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name: _____ Signature: _____ Month: _____ Day: _____ Year: _____ Transporter 2 Printed/Typed Name: _____ Signature: _____ Month: _____ Day: _____ Year: _____						
DESIGNATED FACILITY	18. Discrepancy 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection Manifest Reference Number: _____ U.S. EPA ID Number: _____ 18b. Alternate Facility (or Generator) Facility's Phone: _____ 18c. Signature of Alternate Facility (or Generator): _____ Month: _____ Day: _____ Year: _____						
	19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) 1. H040 2. H040 3. H040 4. H040						
	20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a Printed/Typed Name: _____ Signature: _____ Month: _____ Day: _____ Year: _____						

SHEWCZYK Susan

From: FULLER Brian
Sent: Monday, July 30, 2012 4:05 PM
To: SHEWCZYK Susan
Subject: FW: Transportation of Zr Swarf Drums

FYI

From: Weber, Lee [<mailto:Lee.Weber@ATImetals.com>]
Sent: Tuesday, July 24, 2012 9:18 AM
To: FULLER Brian; DUVAL Rich
Subject: Transportation of Zr Swarf Drums

Brian and Rich,

A quick email to let you know the tentative schedule (transportation across the US is not an exact science) for shipment of the Zr Swarf drums from WTI and ATI PF. The ATI PF drums were picked up in PA on Saturday evening (July 21, 2012). We expect them to arrive at CWMNW by Wed or Thurs (7/25 or 7/26). The WTI drums are scheduled to be picked up on Wednesday morning (7/25) with a drive team to have them at CWMNW Friday afternoon (7/27) or Monday morning. As discussed with CWMNW and Rich we intend to begin treatment on Tuesday morning (7/31). Please let me know if you have any questions or comments. Thanks.



Lee Weber
Director, EH&S

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F: 541-924-6874

Please visit ATI's all-new website: www.atimetals.com

SHEWCZYK Susan

From: Morford, J. Mark [JMMORFORD@stoel.com]
Sent: Monday, June 18, 2012 5:34 PM
To: SHEWCZYK Susan
Cc: John Matson (matson.john@epamail.epa.gov); McAndrews, Lauren; Denham, Jim; Tishok, John M.; Weber, Lee
Subject: Response to DEQ information request
Attachments: 2012-06-18 Letter to Susan Shewczyk.pdf

Susan,

Attached is our letter on behalf of Wah Chang in response to your request for information dated April 13, 2012. The original of this letter, together with the responsive documents on CD is being sent to you by overnight delivery (regular mail to cc's).

Mark

J. Mark Morford

STOEL RIVES LLP | 900 SW Fifth Ave, Suite 2600 | Portland, OR 97204-1268

Direct: (503) 294-9259 | Mobile: (503) 319-1973 | Fax: (503) 220-2480

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